

ABSTRACT

Tire rubber material is highly accurately and efficiently extruded by a positive displacement extruding system that includes, as seen from an upstream side of the tire rubber, a screw extruder unit, a gear pump unit and an extrusion head unit with an extrusion nozzle, which are connected in series with each other. While the tire rubber is caused to flow through the extruding system, the temperature of the rubber material is measured and controlled to be within a predetermined temperature range, in accordance with the measured temperature of the rubber material. The rubber material maintained at a controlled temperature is extruded from the extrusion nozzle, thereby improving the positive displacement performance of the extruding system.